

SALT RIVER PROJECT  
SPECIAL BOARD MEETING

CONTINUATION SPECIAL BOARD )  
MEETING ON PROPOSED CHANGES TO )  
STANDARD ELECTRIC PRICE PLANS )  
AND TERMS AND CONDITIONS OF )  
COMPETITION )  
\_\_\_\_\_ )

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1	<u>Management and Board</u>	Page
2	<u>Consultant Presentations</u>	
3	Mark Bonsall	9
4	Aidan McSheffrey	14
5	Dr. John Chamberlin	26
6	<u>Solar and Other Organizations</u>	
7	Court Rich - The Alliance for Solar Choice	30
8	(TASC)	
9	Sean Seitz - American Solar Deployment	35
10	Alliance (ASDA)	
11	Stan Barnes - Arizonans for Electric Choice	43
12	and Competition (AECC)	
13	Michael McElrath - Freeport McMoRan Copper	48
14	and Gold	
15	Thad Kurowski - SolarCity	55
16	<u>Public Comments</u>	
17	Steven Thompson	59
18	George Kinney	60
19	John Carlson	61
20	Ronald Rich	64
21	Bob Emmelkamp	65
22	Jeffrey Hausauer	67
23	Richard Mason	69
24	Roc Arnett	71
25	William Bodzioch	73

1	<u>Public Comments (Continued)</u>	Page
2	Jeff Spies	75
3	Larkey Hodges	76
4	Mike Curtis	77
5	Pedro Lopez	80
6	Oscar Hernandez	81
7	Gary Yaquinto	83
8	Dave Chacon	86
9	Michael Lynch	90
10	Randy Miller	92
11	Jeanne Devine	96
12	Jacob Everts	98
13	Joseph Hui	100
14	Hal Stahl	102
15	Dwayne Ketchens	103
16	Jim Pitre	105
17	Anna Rose	108
18	Marty Shultz	110
19	Dianne Woods	112
20	Logan Newby	114
21	Jason Armstrong	116
22	Ms. Billy Hunt	118
23	Jeffrey Seeley	119
24	Mark Holohan	119
25	Nancy Tichenor	122

1 meter. The customer can go look at the meter at any point  
2 in time and see what their current demand is. So there is  
3 information available to you.

4 MR. WOODS: Thank you for responding.

5 MR. McSHEFFREY: Lastly, I have two slides that  
6 summarize Management's proposal. These are the changes  
7 Mark had mentioned that are contained within the document  
8 you have in front of you with the revisions, which is the  
9 3.9 percent overall increase. The phase in that would  
10 occur for all customer classes in the 2015 -- summer of  
11 2015, May through October, the 30-minute on-peak E-27  
12 design, as well as discussing the commitment that we have  
13 to have a review of the allocation methods with a broad  
14 array of stakeholders, the E-27 pilot program and  
15 returning with thoughts about alternative designs at a  
16 later date.

17 In terms of the grandfathering, this is what I  
18 summarized before in terms of the 10 years or 20 years  
19 from the date of the installation for Category A, 10 years  
20 for the other categories as well as no limitation on  
21 transfers. So, basically, had the systems run with the  
22 land.

23 We'll be back this afternoon and have more  
24 discussion on these or if I can answer any questions at  
25 this time.

1 MR. ROUSSEAU: Thanks, Aidan.

2 MR. MCSHEFFREY: Thank you. I'll turn it over to  
3 Dr. Chamberlin.

4 MR. ROUSSEAU: Thanks, Aidan.

5 DR. CHAMBERLIN: Mr. President, Mr. Vice  
6 President, members of the Board, I just plan to very  
7 briefly summarize our primary findings and recommendation.

8 The first is that the cost allocation is correct  
9 and it's reasonable and can be relied upon in this process  
10 for setting prices. Clearly there's judgment involved in  
11 performing a cost of service study and people will always  
12 disagree about some of the allocators, but I strongly  
13 believe that the allocators that are used by Management in  
14 this process are correct, reasonable and accurately  
15 calculated.

16 The second is that the proposed price plans move  
17 the class return closer to the system average rate of  
18 return. The adjustments that were needed this time were  
19 generally smaller than what we've seen in the past few  
20 price processes at least.

21 The third finding is that the proposed price plan  
22 slightly improved the alignment of fixed costs and fixed  
23 charges. That's largely done through what I think are  
24 relatively small increases in customer charges, the E-27  
25 rate that I talk about on the next slide, and the

1 introduction of demand charges to E-65 rate.

2 The proposed price plans I think are aligned with  
3 the Board's pricing policies. Clearly there are always  
4 competing objectives, primarily the gradualism and the  
5 cost relation objective. The farther price plans are from  
6 the cost relation objective, the harder it is to find  
7 gradualism while still improving the cost relation.

8 MR. HOOPES: Explain what you mean by cost  
9 relation.

10 DR. CHAMBERLIN: It's the alignment of the price  
11 plans with the underlying cost of serving the -- the  
12 customers that are served on that price plan.

13 MR. HOOPES: It's what the price that the  
14 individual customer pays is more reflective of the cost  
15 that that individual customer caused or not individual,  
16 but a class of customers?

17 DR. CHAMBERLIN: Exactly.

18 So the farther any particular price plan is from  
19 the underlying cost of service for that price plan, the  
20 harder it is to find a relation -- improve that  
21 relationship while still having a gradual approach. I  
22 think the changes that are proposed in this process do  
23 balance your objectives, but that's a judgment for you to  
24 make, not for me. Finally, our recommendation was that  
25 you approve of the proposed price plans for those reasons.

1           Let me talk a little bit about the E-27 price  
2 plan and our findings associated with that. Clearly the  
3 current price plans do not allow full recovery of fixed  
4 costs of serving distributed generation customers. That  
5 means there are unrecovered fixed costs associated with  
6 those customers and those unrecovered costs have to then  
7 be shifted to other customers within those price plans.  
8 That cost shift is significant and it's growing. It's  
9 currently about \$9 to \$10 million a year and it will get  
10 bigger unless there is a solution that's adopted.

11           I think that the E-27 price plan is better than  
12 any of the alternatives that has been proposed, not just  
13 here, but anywhere in the country or around the world for  
14 that matter. I think it's better primarily because it not  
15 only fixes the problem -- it not only fixes the problem,  
16 but it gives customers an opportunity to save in a way  
17 that's consistent with cost savings for SRP. Other  
18 alternatives don't allow that to happen.

19           MR. ROUSSEAU: I'm sorry. I need to ask the  
20 audience to respect the speakers, please.

21           DR. CHAMBERLIN: So for that reason, we recommend  
22 that you approve the proposed E-27 price plan.

23           Thank you. I can address questions now or do  
24 that later this afternoon when I come back.

25           MR. ROUSSEAU: Dr. Chamberlin, can you talk about



1 the proposed E-27 pilot and the attractiveness to a non-DG  
2 customer and I don't know if you've looked at that  
3 specifically?

4 DR. CHAMBERLIN: Well, there are two kinds of  
5 customers that are not DG customers who might be attracted  
6 to the E-27 pilot. One is the customer who has a load  
7 shape by its nature that would allow them to see a lower  
8 bill under an E-27 rate than an E-26 or E-23 or whatever  
9 rate they're currently on. That's the kind of a customer  
10 that you wouldn't particularly like to jump to, an E-27  
11 rate, because it's a revenue loss. The customer wouldn't  
12 be doing anything, but would be benefitting under the rate  
13 and there would be some of those customers.

14 The second kind of a customer is a customer who  
15 could enroll in a proposed E-27 pilot program and respond  
16 to the rate in such a way that they see savings. That is  
17 a demand reduction is the most likely response and that  
18 demand reduction will bring about a cost reduction for the  
19 company, which is why that is good for both those  
20 customers and for the company itself.

21 MR. ROUSSEAU: Okay. All right. Thank you.  
22 We'll talk to you later.

23 DR. CHAMBERLIN: Okay.

24 MR. ROUSSEAU: Are we at the next portion of the  
25 agenda where we're going to hear from --

1 MR. MCSHEFFREY: Yes, we are ready to start the  
2 next session, which I believe is public comment.

3 MR. ROUSSEAU: Okay. We have down there's  
4 comment from organizations, solar included. So that's --  
5 I don't know who's orchestrating those speakers. Do we  
6 have a lineup?

7 MS. LONON: I have a list.

8 MR. ROUSSEAU: Okay. Terri's going to go ahead  
9 and solve this mystery and call on the next speaker,  
10 please.

11 MS. LONON: Can we hear from Court Rich of TASC?

12 MR. RICH: Let me make sure this works. Good  
13 morning, Board members, President Rousseau. We've met  
14 before. My name is Court Rich. I'm here on behalf of The  
15 Alliance for Solar Choice.

16 So we have a unique situation here today. We can  
17 actually see the future. We know the results of what  
18 you're going to do today because it actually started on  
19 December 8th. We don't need a fancy DeLorean traveling  
20 through time. We can see it right now and here's what we  
21 know. From December 8th to January 15th, 20 people signed  
22 up for solar, 20 people. I don't know if they knew what  
23 they were getting, but they signed up for solar. We asked  
24 your staff since then to give us more numbers and they  
25 refuse. So I'd like to know how many have signed up

1 MS. LONON: Your name?

2 MR. KUROWSKI: Thad Kurowski with SolarCity.

3 MS. LONON: I don't have that name, but it's your  
4 call.

5 MR. ROUSSEAU: I appreciate all the suggestions  
6 from the audience, but that's not helping sort through  
7 this.

8 I'm going to go ahead and continue describing the  
9 public process and you can be our first speaker in the  
10 public process and we'll give you some latitude.

11 Again, the reminder is if you're interested in  
12 speaking and making oral comments, please register with  
13 the Secretary Staff seated by the entrance, if you haven't  
14 already taken advantage of that. We would like to hear  
15 and give as many people as possible the opportunity to  
16 speak. We do need to manage time.

17 So that we can accomplish all of our objectives,  
18 I would encourage those who intend to speak to avoid  
19 repetition and if you're a member of a group, to appoint a  
20 representative to speak on your group's behalf in hopes  
21 that we can satisfy all requests during the time allotted  
22 for public comment. Except where arranged, we would like  
23 to restrict oral statements to two minutes each.

24 So we'll now proceed with the representative from  
25 SolarCity. Forgive me. I don't remember your.

1 MR. KUROWSKI: I have a presentation that I  
2 brought up. Thank you, President Rousseau, Vice President  
3 Hoopes, members of the Board. I've been up here before.  
4 I appreciate the opportunity to speak to you again today.

5 MS. LONON: Can we have your name, please?

6 MR. KUROWSKI: Thad Kurowski with SolarCity.

7 So hopefully you all recognize this slide. I'm  
8 not going to repeat all of the things that I said the last  
9 time I was up and presenting on the 9th. That day you  
10 heard a lot of comments from a number of customers and  
11 industry. You heard a lot of the same things echoed here  
12 today in terms of discussion about the process that we've  
13 gone through and I won't take time rehashing the reasons  
14 why the distributed generation rate is all of these  
15 things.

16 But one of the things that I wanted to make sure  
17 to point out is that there is a disparity in the  
18 information you received and you've heard over the course  
19 of the conversations and one thing really stands out and  
20 that is coming back, there's been a lack of transparency  
21 in the process that we've had and it's -- what it's really  
22 done in my opinion is placed all of you in a position  
23 where you're likely feeling or maybe feeling like you're  
24 not quite sure what the right thing then to do is because  
25 there is this wide range that you've heard.

1           So what I'd like to suggest is that we take time,  
2 we step back and you hold off on any vote that you would  
3 have today on the DG pricing proposal and the aspects of  
4 that and let's have a conversation through an actual  
5 stakeholder process. We heard a lot of discussion about  
6 how the ACC goes through its processes today and I think  
7 that SolarCity, speaking on behalf of SolarCity, we would  
8 love to be part of that process. You've heard this echoed  
9 from Mr. Rich, from Mr Seitz, collaboration is what's  
10 needed and that's not what we have had.

11           So while those conversations would be taking  
12 place in an open process, I'd suggest we back up and we  
13 unwind and start fresh in terms of the DG proposal. Let's  
14 make sure that any grandfathering decisions and rate  
15 changes would be perspective from the date of the vote,  
16 from the date that alternative proposal was voted on and  
17 approved by the Board and, excuse me, that's out of  
18 fairness. All customers who signed up before the vote,  
19 they should be grandfathered for 20 years. If you choose  
20 this direction, we should get a transparent process where  
21 all of the Board members can feel confident in the  
22 decision that they make at the end of the day.

23           One of the things that I want to point to is you  
24 have a huge number of public comment in the Info Room and  
25 letters that have been submitted by customers and industry

1 and others. One I want to point out to you was sent out  
2 on February 9th by Vickie Sandler, who has spoken in front  
3 of the Board before. She has 33 years in the energy  
4 business, extensive ratemaking background with FERC and  
5 APS. She was also the president of the APS Energy  
6 Services. They're a competitive branch, so she has an  
7 understanding of both sides of the competitive industry  
8 and the ratemaking process. I would highly encourage you  
9 to look at that and read that letter thoroughly before you  
10 vote and I just want to highlight a few things and the  
11 reason why I think it's a benefit to read that is she's an  
12 expert who has a deep understanding, but she also says  
13 what we need to do is look at all of the alternatives.  
14 All the alternatives meaning don't look at just this  
15 proposal or what the changes are that Management has  
16 provided based on your comments and questions. We should  
17 go through an open process. Those are her  
18 recommendations.

19 She goes on to criticize, and I'm paraphrasing  
20 here, excuse me, the cost shift rationale is usually  
21 related to shift in cost allocation between customer  
22 classes. So small commercial subsidizes residential  
23 routinely not within a single customer class. What she  
24 says is subsetting about four percent of the utility  
25 ratepayers, solar customers into a subclass within a rate

1 class is dangerous ratemaking. I think those points are  
2 worth highlighting again. I'd encourage you to read that  
3 letter.

4 So we've heard a lot in the process about --  
5 heard a lot about the problem of the process and I'm going  
6 to take a step further as been suggested before me and  
7 kind of play out what happens as a result of what we're  
8 seeing.

9 So if the DG proposal is voted on today and voted  
10 in, you're eliminating the ability to go solar in SRP  
11 service territory and you're doing it in a way that can't  
12 be justified. If it's voted in today, what's gonna happen  
13 is the industry, SolarCity, is going to have no choice but  
14 to challenge the decision in the courts, as we've heard  
15 reference to. In that event, SRP ends up having to  
16 produce evidence, hire experts to do the analysis and  
17 provide the justification, but you have to do it all in  
18 the courts. Takes -- it's a lengthy process. It's not  
19 something that we certainly would like to see happen and  
20 it would not be our choice to go that route, but that's  
21 the decision that we would have to make. At the end of  
22 the process, we're confident that if we have to go through  
23 the courts, that the courts are going to find the price  
24 plan cannot be defended and we're gonna have to start this  
25 all over again anyway.

1           So what I would suggest is we have the time,  
2 there's no reason to rush the vote, as Ms. Sandler  
3 suggests and we can come up with a better alternative and  
4 not unfairly penalize solar customers or the industry in  
5 the meantime.

6           Thank you.

7           MR. ROUSSEAU: Any questions for Thad. Okay.  
8 Thanks very much.

9           So we're now going to proceed with public  
10 comments and, again, I'd ask everybody to reserve their  
11 applause. It just adds to the amount of time and,  
12 ultimately, I think we'll regret that we didn't hear from  
13 people, which is, again, the whole intent as opposed to  
14 respective reaction.

15           So, Terri, would you call the first member of the  
16 public?

17           MS. LONON: Sure. Steven Thompson.

18           MR. ROUSSEAU: Do you want to call another name  
19 for the second up? Just one second, Steve.

20           MS. LONON: Sure. George Kinney.

21           MR. ROUSSEAU: George, if you could be ready.  
22 Thanks. I'm sorry, Steve. Go ahead.

23           MR. THOMPSON: Good morning. Thank you for  
24 hearing me.

25           I've been a solar customer for several years. My



1 upfront investment was about -- after rebates and  
2 everything, it was about \$14,000. So I appreciate your  
3 reconsidering the \$50 a month fee. That's much  
4 appreciated.

5 All I would like to say is that we know that  
6 climate change is happening. We know that carbon fuels  
7 are a big cause of that. We know the Southwest is getting  
8 dryer and it is incumbent upon SRP to take care of the  
9 water supply as well as the fuel supply and as the water  
10 supply is being threatened by the heating of the  
11 Southwest, it has to be entered into the consideration of  
12 these matters.

13 Thank you for your time.

14 MR. ROUSSEAU: Thanks very much.

15 MS. LONON: After George is Tyler Carlson.

16 MR. KINNEY: I'm George Kinney. Born here. Paid  
17 SRP rates for all my life. Every transmission tower you  
18 see I've already paid for. I've paid for the peaker plant  
19 that sits across from me at Kyrene. I know you know what  
20 a peaker and a load plant do, but let me get on to what  
21 why I'm here.

22 Before me, I present to you the agreement I  
23 signed with SRP. If you notice, there's a box to check.  
24 As part of this agreement, a formal contract between SRP  
25 and me calls for several quid pro quos. One of the things

1 manage consumer bills and using that as part of the rate  
2 structure is a really good way to do that.

3 SRP has done a great job of ramping up its  
4 investment in energy efficiency and is an organization  
5 that works to protect pocketbooks of individual consumers  
6 and works with small businesses on a regular basis. We  
7 think that's the perfect direction to be heading in, but  
8 there's a disconnect between having those programs in  
9 place and then not allowing customers to better manage  
10 their bills on a monthly basis as well. So we encourage  
11 you to ask Management those questions, to vote no on that  
12 aspect today.

13 I don't believe that this is a done deal. I  
14 believe members of the Board are independent. You've  
15 asked a lot of very good questions over these proceedings.  
16 We appreciate that. We encourage you if this is the  
17 direction you're moving into today, that you don't leave  
18 here without setting up a process that ensures a next  
19 go-around. There are better options in front of you and  
20 options that really help customers, again, both  
21 residential and businesses, to manage their bills and to  
22 have a rate charge on a monthly basis that is, again, more  
23 in line with other utilities across the country.

24 Thank you.

25 MR. ROUSSEAU: Thanks, Diane.

1 MS. LONON: Mr. Verschoor.

2 MR. ROUSSEAU: I think that concludes our public  
3 comment. I don't see Mr. Verschoor. So I think next up  
4 we have Aidan, unless anybody on the Board has any  
5 questions inspired. Otherwise, I'm assuming Management  
6 will address the questions.

7 MR. MCSHEFFREY: We have a few Management experts  
8 that are scheduled to speak next. We'll start with  
9 Mr. Ashley Brown, Ahmad Faruqui and then move to John  
10 Chamberlin. Then I'll come and be glad to answer any  
11 questions you have of Management and I have a few comments  
12 and we'll have Mark come up after me.

13 MR. ROUSSEAU: Thanks, Aidan.

14 MR. BROWN: President Rousseau, Vice President  
15 Hoopes, members of the Board, I appreciate the opportunity  
16 to be here with you. Although, I have to tell you, having  
17 served 10 years as commissioner of the Public Utilities  
18 Commission of Ohio, this is déjà vu for me usually sitting  
19 on your side of the table. I have to commend you because  
20 you hold your meetings during the day. We used to go  
21 until 2:00 and 3:00 in the morning doing the same thing.

22 So I am empathetic to the enormity of the task  
23 and the decisions you have to make and also the efforts  
24 you've made to make this a participatory process and an  
25 open process. In fact, I have to say that when I reviewed

1 some of the records in this case because I was sort of --  
2 when I was a commissioner, I was really fixed on making  
3 sure I had all the information I needed before making  
4 decisions and you have before you a very rich record,  
5 including some of the records that was made today and at  
6 the other public meetings, a very rich record full of all  
7 of the arguments that you need to contemplate and I don't  
8 see anything deficient in that record that would keep you  
9 from making a decision and I base that on having been a  
10 commissioner for 10 years and having to make these kinds  
11 of decisions.

12           The other thing that needs to be clear is this is  
13 not a matter of life or death about solar energy. In  
14 fact, let's be very clear about where the costs of solar  
15 have been going in the last few years. Three years ago,  
16 you would see solar panels going for as much as \$5,300 per  
17 installed kilowatt. Today the price is -- the lowest I've  
18 seen in my home state of Massachusetts is about 3,300, but  
19 I understand in California, it's dipped into the two  
20 thousands. So the price has declined rapidly.

21           Now, if there was a need for a subsidized  
22 rate -- and, actually, net metering was never designed as  
23 a subsidy. It was a default because there weren't  
24 alternatives several years ago, but if there was a need  
25 for the subsidy, it's when the price is at \$5,300. I'm

1 only talking about the cross-subsidies. I'm not talking  
2 about the ITC. I'm not talking about the RECs market. So  
3 the fact is the prices declined.

4           There's a recent study, in fact, in the Lawrence  
5 Berkeley Lab that is really interesting. What they're  
6 saying is it's remarkable about the price declining, and  
7 you see this dramatically in some other countries, is that  
8 it hasn't declined as much in the U.S. Why? Because as  
9 the costs decline with net metering setting a fixed high  
10 price, the installers are grabbing more of the money and  
11 using it for marketing, using it for their own profits and  
12 it's not driving down the price to consumers.

13           So making a decision quickly will actually make  
14 solar more available probably at lower costs to more  
15 customers. This isn't the death bell. It's, in fact, the  
16 opposite. It's the stimulus for solar and it reflects to  
17 allow customers to actually get the advantage of where the  
18 market is going. That's important. The cost of solar is  
19 declining. That's a good thing. It means there will be  
20 more solar and it means the need for artificially inflated  
21 prices doesn't make sense. Doing that as soon as you can  
22 do that makes it to the benefit of all SRP customers,  
23 whether they're solar or whether they're non-solar.

24           There was a dialogue I think, Director Woods, you  
25 asked a question of, I forgot the gentleman's name, but it

1 was an installer about more efficiency and it was a very  
2 good question. What's interesting is he said, and he's  
3 absolutely right, it's important to have incentives to  
4 promote efficiency. That's exactly what this proposal  
5 does. It provides an incentive to capture more energy at  
6 the time of peak demand as opposed to now where you get  
7 your -- really your incentive is simply to produce  
8 kilowatt-hours regardless of when the system benefits as  
9 opposed to a more western exposure and the same thing is  
10 true with battery, other kinds of storage technology that  
11 allows solar energy to be delivered at the time the system  
12 most values it and most needs it. So, in fact, the  
13 incentives are built into the existing rate proposal and  
14 the incentives are a terrific idea and that's exactly  
15 where things ought to go.

16           The other thing about the proposal that's  
17 important is there's been a lot of discussion about are  
18 you penalizing solar and that. The point is rate  
19 classifications, customer classifications are based on the  
20 load characteristics of customers. The simple fact is  
21 solar residential customers have a different load  
22 configuration than non-solar residential customers. They  
23 are different. They produce energy at various points in  
24 time when the sun is shining, not always predictably.  
25 Their demand doesn't necessarily -- generally solar

1 production is not coincident with demand in Arizona, but  
2 for that matter, anywhere else in the United States. It  
3 tends to be off-peak. Sometimes at the shoulder, but  
4 rarely on-peak. So it produces -- provides energy at  
5 times the system finds it to be of less value and there's  
6 a recognition and those customers, therefore, have a  
7 different characteristic. They put different demands on  
8 the system.

9           One of the bedrock principles of electricity  
10 pricing, of regulatory pricing anywhere, actually, is the  
11 cost causer should pay the cost that he or she causes to  
12 be incurred. In this case, the characteristics of  
13 residential solar customers are different than a  
14 residential non-solar. If that imposes costs, then the  
15 rates they pay should be reflected. So it's not a  
16 penalty. It's a reflection of what actually is their load  
17 characteristics and their configuration as a customer.

18           The other thing about the status quo, the  
19 existing net metering and why this proposal is such an  
20 improvement is if you -- if there was a need to subsidize  
21 solar, there's a rule, some general economic principles  
22 about how do you subsidize an embryonic technology. Solar  
23 is not embryonic. It's now really commercial and viable.  
24 How do you do that? What you do is you do a targeted  
25 subsidy, narrowly targeted, and you phase it out. You

1 don't create a subsidy in eternity. You phase it out over  
2 time giving the developers the technology, the incentive  
3 to make it more efficient, to be more commercially viable  
4 and to be sustainable in the long run. Giving the  
5 declining cost, dramatically declining cost of solar  
6 panels, it's clear that the time for the subsidy, at least  
7 the cross-subsidy, that's implicit in net metering is  
8 gone.

9           And, finally, I urge you -- and this I think is a  
10 very important point and often gets ignored. There are  
11 two studies I've seen and there's also a comment by the  
12 staff of the Arizona Corporation Commission which clearly  
13 show that net metering is status quo, is, in fact, a  
14 regressive social subsidy. It takes money from the less  
15 affluent people and transfers it to the more affluent  
16 people. Why? It's intuitively obvious why. The  
17 Commission staff in Arizona knows that.

18           Most poor people don't own their own homes, so  
19 they don't have roofs to put panels on and, secondly, they  
20 don't have the capital necessary to make investments, nor  
21 are they sufficiently credit worthy to have a lease so  
22 that the opportunity to do solar just isn't there. If  
23 solar customers aren't picking up their share of the fixed  
24 cost of the system and are transferring those burdens to  
25 non-solar and the lower income people, what it really --



1 what net metering really has done, and there's really not  
2 a lot of dispute about this, is it's essentially become a  
3 kind of tax on the poor or a tax on the less affluent and  
4 what --

5 As I said, the Arizona staff, the Commission  
6 staff of the Arizona Commission noted it. The E3  
7 Consulting Firm in California on behalf of the Public  
8 Utilities Commission did the study that made it clear that  
9 that's what was going on and there's also a study that was  
10 done in New Jersey that shows pretty clearly exactly the  
11 same thing and even if you think about it intuitively as  
12 the Commission staff did in Arizona, that's obvious.

13 So in conclusion, what I'd like to say is simply,  
14 you have a really rich record to make a decision. There  
15 are good reasons including enabling more folks to take  
16 advantage of solar to make a decision sooner rather than  
17 later. You've heard lots of points of view. That's  
18 commendable and I urge you to make a decision I suggest  
19 would be appropriate, but to make a decision, I'm not sure  
20 you're going to get a lot or any more information than you  
21 already have at your disposal.

22 Thank you very much.

23 MR. ROUSSEAU: Any questions. Thank you.

24 Again, please -- our public comments we've  
25 concluded. I think we'd like to show all the speakers the

1 same level of respect.

2 DR. FARUQUI: Good afternoon. My pleasure to be  
3 here. I will talk briefly about some new updates that  
4 I've done to the benchmarking study which I presented  
5 previously.

6 I talk about development in Australia, Germany  
7 and Spain, all of the overseas experiences and I also talk  
8 about a very eminent development that will be happening  
9 next in a Midwestern state. So these are data points that  
10 were not in my previous study.

11 Australia, as I think I mentioned previously, has  
12 1.25 million rooftop solar units compared to a national  
13 population of some nine million households or a  
14 penetration rate of 14 percent. There are a lot of  
15 reasons why that is the case. I won't go into those, but  
16 I'll just simply make a comment that in some states, which  
17 is Queensland which includes the City of Brisbane that you  
18 might be familiar with and the Gold Coast, the percentage  
19 is even higher just a bit, about 20 percent.

20 What is the main driver? One of the key drivers  
21 is what Ashley Brown just mentioned, it's the falling  
22 price of what it will take sales. More importantly, it's  
23 a rate design that's largely volumetric in nature. It has  
24 no demand charge and net energy metering by default has  
25 been the rate. So it has been a tremendous bargaining for

1 people to go and put rooftop solar on the roof.

2           What we have now is a very recent paper by  
3 Professor Simshauser who also works for AGL in Australia,  
4 one of the Australian energy companies. He has estimated  
5 using very, very detailed data the cross-subsidy that  
6 exists between customers with solar and the customers  
7 without solar. So to do the analysis and keep it simple,  
8 he classified a household into four types based on whether  
9 or not they have central air conditioning and based on  
10 whether or not they have rooftop solar panels or PVs.  
11 What he has done is then he has taken the usage patterns  
12 on the current tariff of how much they're paying and  
13 compare that to what they should be paying based on the  
14 cost of service study and he finds that households with no  
15 air conditioning and no PVs are paying an extra \$74.37 per  
16 year and those with air conditioning and no PV are paying  
17 an extra \$70.78 per year. These are the folks who are  
18 paying more.

19           Then you have households with PVs. Depending on  
20 whether they have air conditioning, they are receiving a  
21 subsidy, if you will, from the others of either \$167.62,  
22 those who do not have air conditioning, which are in the  
23 minor because most of them do have air conditioning. So  
24 those if you have air conditioning and you have PV, you're  
25 paying \$199.23 less per year. Now, that's on an annual

1 basis.

2           If you take all of the customers and you estimate  
3 the wealth transfers that are going on, you have 979,000  
4 customers with no PV and you have 261,000 customers with  
5 PV, that will transfer to \$70.3 million per year. His  
6 conclusion is that this largely is a problem due to the  
7 current tariff being volumetric in nature and not having  
8 any relationship for the cost structure of the grid. The  
9 advantage, of course, of these tariffs are very easy for  
10 customers to understand, but they do deviate significantly  
11 from the cost causation principle.

12           They lead to inefficiencies in resource  
13 allocation and he points out that the load factor in the  
14 state is declining rapidly because the solar customers are  
15 not reducing the peak demand. On the other hand, they're  
16 reducing energy by significant amounts. So the load  
17 factor has dropped enormously. His recommendation is the  
18 introduction of demand charges which will restore equity  
19 among customers and he's also recommending that a  
20 Time-Of-Use rate be used for the energy charges.

21           Moving to Germany, Germany has 32.4 gigawatt  
22 installed PV capacity, the largest in the globe, as you  
23 all know, followed closely by Italy at 16.4 and China at  
24 8.3. Just focusing on Germany, the main economic  
25 incentive for rooftop PV in Germany is not net energy

1 metering, it is the feed-in tariff which applies to all  
2 power generated by the panels irrespective of whether a  
3 power is consumed at home or exploited over the grid.  
4 Some people call this gross feed-in tariff. It's where  
5 any kilowatt-hour that you are generating from the grid,  
6 you get the feed-in tariff and that has, of course,  
7 resulted in enormous price increases.

8           So over the 2000 and 2012 period, these are  
9 authors whose papers I cite at the end, the German names,  
10 they've estimated the solar cross-subsidy amount to 122.4  
11 billion euros, that's billion within a "B", and/or that  
12 period of 12 years. This had started to come down as  
13 they're scaling back on these tariffs, the incentives.  
14 The annual peak in terms of the subsidy was reached in  
15 2000 when it amounted to 30 billion euros.

16           In Spain, Spain also has a significant amount of  
17 PVs, but the whole country has realized that it is not  
18 going in the right direction. It has been overly  
19 subsidized and it's become very expensive for the  
20 taxpayers. It's politically very, very unpopular.  
21 They're taking steps to significantly scale back the  
22 subsidies, but in addition, they're changing the tariff by  
23 raising the access charge and lowering the volumetric  
24 charge. They haven't introduced a demand charge at this  
25 point, but they have raised the excess charge by a large

1 amount.

2           Some countries in Europe, as I mentioned the last  
3 time, do have a demand charge like France and Italy and I  
4 was recently informed Portugal has it, also. What they're  
5 also doing is creating regulations to prevent  
6 self-consumption because there's a prospect that will  
7 impose a grid backup toll which is to ensure that all  
8 solar customers pay the full cost of the grid. They are  
9 also going to consider imposing fines if this happens.

10           So that's a quick review of the overseas  
11 developments. Let me talk about a state in the Midwest  
12 much closer to home where the penetration of PV is still  
13 very, very small, but they are concerned about creating a  
14 situation where as we have seen elsewhere, net energy  
15 metering will encourage customers to go down a certain  
16 path and then it becomes very difficult to pull back or to  
17 make changes. What they're doing is while the numbers are  
18 still very small, they are going to fix their rates and  
19 what they will do for the customers who go on DG, they  
20 will give them two options. One option is a demand charge  
21 with a fixed charge and a flat volumetric rate. The other  
22 option is just a high, very high flat charge compared to  
23 what you will have if you're not a DG customer.

24           Those are the two choices they're going to  
25 provide the DG customers and I believe testimony's going

1 to be filed next Monday and you will see the results come  
2 out. They're proposing either a three-part rate or a  
3 two-part rate with a very high fixed charge going to  
4 customers with DG.

5 All I'm doing is trying to make the point, this  
6 is a national issue. It's an international issue. The  
7 current rate design is not cost causation driven. It's  
8 creating massive cross-subsidies that are often hidden and  
9 not made public, but the number of small people don't  
10 worry about it, but at some point, it accumulates like you  
11 see the numbers in Australia and Germany.

12 Delaying the decision obviously is an option and  
13 many people have delayed the decision in Australia for  
14 five years. In Germany, they still have not changed the  
15 rates. They've delayed it you could say by 12 years. So  
16 there is that opportunity to delay, but, obviously, it  
17 comes with its own cost and in my personal view based on  
18 what I've seen in Australia and Germany, is that you  
19 higher rates for all customers, but in addition, if you're  
20 ultimately going to do a grandfathering approach, then you  
21 expand a pool of customers who will have to be  
22 grandfathered and then it becomes very expensive and very  
23 difficult.

24 That's it for me. Thank you.

25 MR. HOOPES: Dr. Faruqui, let me ask you. You

1 spoke about Germany and it is my understanding that over  
2 the past couple of years, that Germany has had to increase  
3 its coal generation. Am I correct in that?

4 DR. FARUQUI: That's my understanding as well as  
5 some of it is coming from their having to buy it from  
6 other regions, other countries. They're having to import  
7 power, a lot of which could be coal based.

8 MR. HOOPES: Is there any connection between that  
9 phenomenon and the issues that you describe with the  
10 pricing structure?

11 DR. FARUQUI: It's very difficult for me to say,  
12 having not studied the problem in detail, but I'm trying  
13 to find that out because it looks like Germany was in a  
14 path of renewable energy. It was in a path to lower  
15 carbon emissions and also after Fukushima, to cut back on  
16 nuclear. So they're trying to do a lot of things at the  
17 same time and that's what's creating I believe this  
18 contradiction.

19 I actually have a visitor coming in from Germany  
20 utility next week, RWE, hoping to ask him some more of  
21 those questions. It is a very confusing picture and I  
22 believe that nobody's happy with what's happening there.

23 MR. HOOPES: Thank you.

24 MR. ROUSSEAU: Thanks, Dr. Faruqui.

25 DR. FARUQUI: Thank you.



1 AUDIENCE MEMBER: What Midwestern state was it?

2 DR. FARUQUI: I have a non-disclosure agreement.  
3 I cannot disclose it, but as I said, it will be revealed  
4 on Monday.

5 MR. ROUSSEAU: Thanks.

6 DR. CHAMBERLIN: Good afternoon. I had just one  
7 issue that I want to talk about and that's whether there  
8 is adequate information for you to make a decision,  
9 whatever that decision should be. I just have a few  
10 points to make about that.

11 I think there's a comment earlier today that the  
12 cost of service information was insufficient and, in fact,  
13 that the person who made the comment said that he would be  
14 surprised if I had made a request to see any of that cost  
15 of service information before last December. So I just  
16 want to remind you that in the last price process, which  
17 was 2012, there were issues raised about the cost of  
18 service study. I raised some of them. There were other  
19 parties that raised some of them. What we decided to do  
20 is have a separate out-of-the-price process review of the  
21 cost of service study, all of the allocators, all of the  
22 issues that had been raised in the price process. We did  
23 that. That commenced I think in June of 2013. We did  
24 that review.

25 I made a presentation to you with the results of

1 that review, I think that was in January of 2014, and then  
2 when this price process was -- when the early analysis  
3 that was going to feed into this price process commenced,  
4 it commenced with the new cost of service work that was  
5 done, I think it was May or June of this year, and we  
6 started to get those results and review the cost of  
7 service study in a significant way. I think it was in  
8 June of this year through the September, early October  
9 period. So there was a pretty substantial period of time  
10 with the separate out-of-the-price process review of the  
11 cost of service study.

12 Secondly, the review of the price plans that we  
13 performed was comparable, if not in more depth than the  
14 review of price plans that we have done in the previous  
15 price processes dating back to 2003. I think clearly,  
16 Management has presented comparable or greater information  
17 than in previous price processes and our review was  
18 comparable or in more depth in those as well.

19 I had presented the status of our work to you. I  
20 think this forum today I think is the ninth time since we  
21 commenced this work. Some of that involved a status of  
22 options that might be available to protect -- to address  
23 particular issues and others was sort of status reviews of  
24 where we were in our work.

25 Lastly, with respect to the E-27 proposal, it is

1 to -- that's really kind of why you would or wouldn't  
2 distinguish within this population.

3 Any other --

4 MR. ROUSSEAU: He's calling for the question. Is  
5 there a second to call for the question?

6 MR. WOODS: Second.

7 MR. ROUSSEAU: Second. Any discussion on calling  
8 for the question? If not, all in favor of calling for the  
9 question -- we're just calling for the question, which  
10 means we would then go to vote and then we'd be happy to  
11 have you clarify.

12 So all in favor of calling for the question and  
13 ending the debate on this topic, raise your right hand,  
14 please.

15 (Hands raised.)

16 MR. ROUSSEAU: All opposed to calling for the  
17 question, raise your right hand.

18 (Hands raised.)

19 MR. ROUSSEAU: Okay. We'll call for the  
20 question.

21 Now, you were going to clarify what the question  
22 is?

23 MR. HULL: One more time to make sure I know how  
24 to modify the resolution. I understand I believe that  
25 that right now would be the longer of 10 years from April

1 1st, 2015 or 20 years after the date of installation  
2 applies to all Categories A through D, parties with the  
3 grandfathering would run with the property and while  
4 grandfathered, those customers would continue to be  
5 eligible for the residential price plans and for those who  
6 met the December 8th date that haven't yet installed their  
7 unit, they would have one year from today to maintain  
8 their eligibility for the grandfathering?

9 MR. ROUSSEAU: Arthur, can you use this?

10 MR. FREEMAN: What's the last date then that  
11 this -- that we're voting on?

12 MR. HULL: For the last comment that I was making  
13 was that those who had not yet installed their unit but  
14 did apply or have a contract by December 8th, we will give  
15 them one year from today to have their unit  
16 interconnected.

17 MR. FREEMAN: If they install it one year from  
18 now, when is their grandfathering?

19 MR. HULL: It would be the longer of 10 years  
20 from April 2015. So that still is a defined date or  
21 practically 20 years from the date of installation, so 21  
22 years from now.

23 MR. ROUSSEAU: Fred, does that meet your motion?

24 MR. ASH: Yes.

25 MR. ROUSSEAU: Thanks. I guess we're voting. So

1 all in favor of that motion as stated, please raise your  
2 right hand.

3 (Hands raised.)

4 MR. ROUSSEAU: All opposed.

5 (Hands raised.)

6 MR. ROUSSEAU: Motion passes.

7 Again, it's been said around this table up here  
8 by my colleagues that we appreciate the process. We  
9 appreciate your participation in the process. We know  
10 it's not an easy one and I think we're looking forward to  
11 staying attune to what is the impact of this action and,  
12 again, thank you very much for your participation and,  
13 Management, thanks for your efforts. Our consultants, we  
14 appreciate you all making an effort to be here with us and  
15 your help and guidance. If there's no other business to  
16 come before us, we're adjourn. Thanks.

17 (Whereupon, the proceedings concluded at 4:22  
18 p.m.)

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12 I FURTHER CERTIFY that I am in no way related to nor  
13 employed by any of the parties hereto nor am I in any way  
14 interested in the outcome hereof.

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